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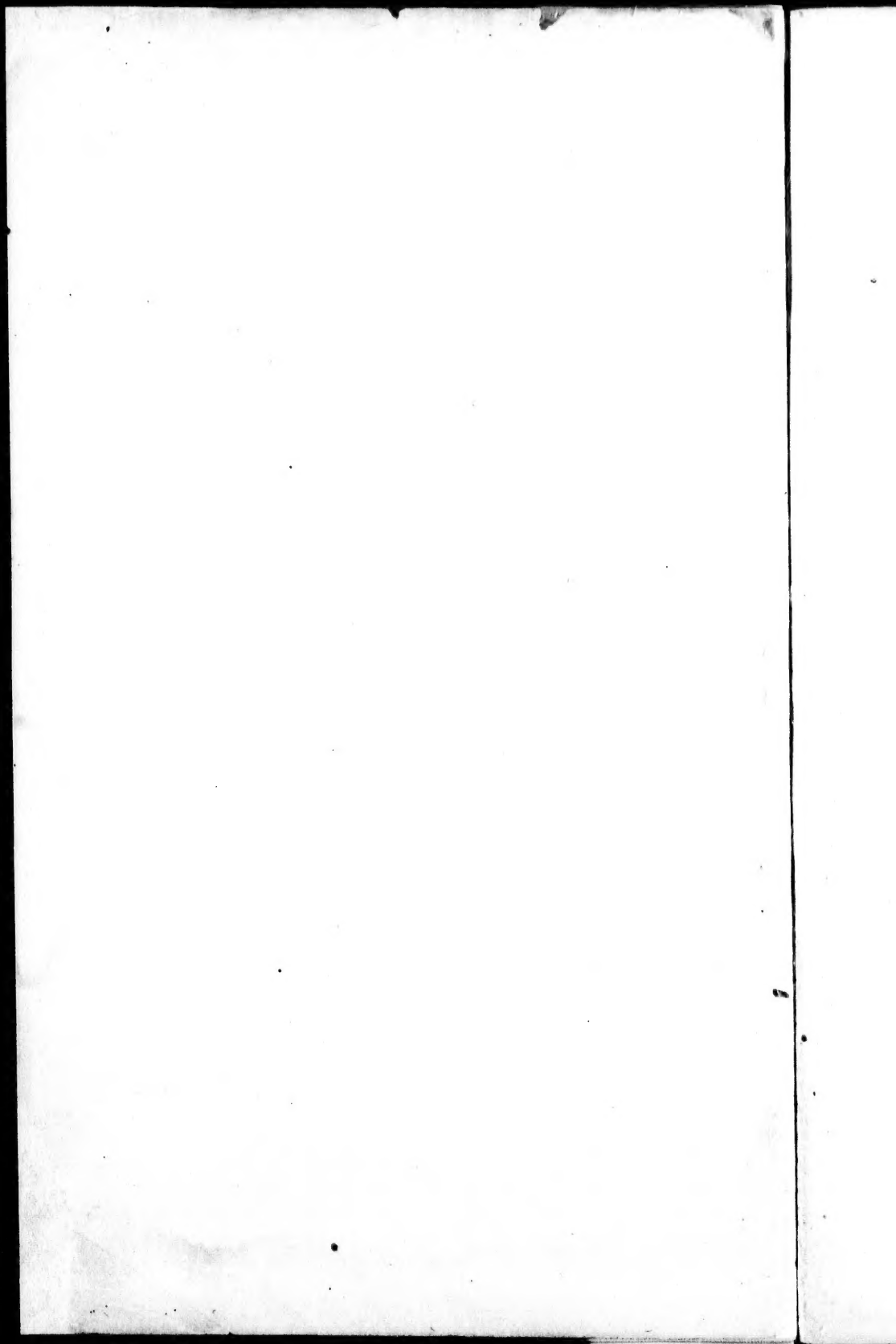
PHYSICAL TRAINING IN SCHOOLS,
IN A SERIES OF
GYMNASTIC EXERCISES.

ILLUSTRATED BY
UPWARDS OF ONE HUNDRED ENGRAVINGS
OF 1 2
DIFFERENT POSITIONS OF THE GYMNAST;
WITH AN INTRODUCTORY SKETCH OF THE
ATHLETIC GAMES OF ANTIQUITY.



TORONTO:
EDUCATIONAL DEPOSITORY,
DEPARTMENT OF PUBLIC INSTRUCTION FOR UPPER CANADA.
1852.

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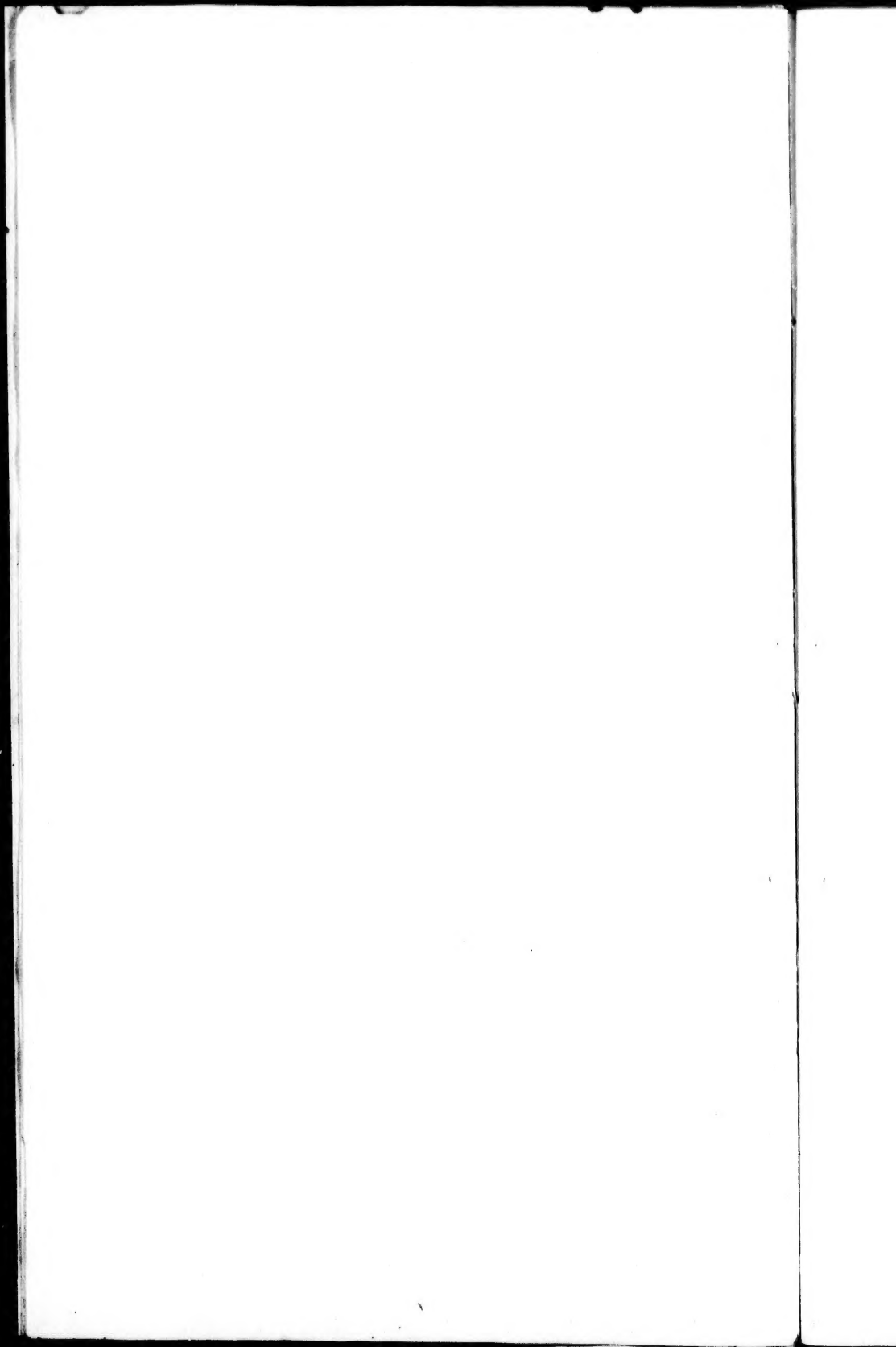
PREFATORY NOTE.

DEEMING it important to preserve the series of articles on "Physical Training in Schools," which have appeared in successive numbers of the *Journal of Education* for Upper Canada this year, we have re-printed them, in a connected form, in this pamphlet—in the hope that, in their present shape, they will contribute to promote the more general introduction of this important branch of training into our Public Schools.

We have added a short illustrative sketch of the Athletic Games practised by the ancient Greeks and Romans, which will form an appropriate introduction to the general subject of the pamphlet.

EDUCATION OFFICE,

Toronto, 12th August, 1852.



I.

INTRODUCTORY SKETCH

OF THE

ATHLETIC GAMES OF THE ANCIENTS.

AMONG the Greeks, periodical GAMES were of high antiquity, and exerted an important influence upon their national character. Such games were early celebrated, especially in honor of the dead ; and HOMER, the father of Grecian poetry, describes, in his account of the funeral of PATROCLUS, the chariot races, foot-races, boxing, wrestling, throwing the quoit, &c. These games were at length connected with the *religious* festivals of the Greeks, were deemed *sacred*, and regarded as a part of their religion. In his Epistle to the Grecian Christians at Corinth, ST. PAUL refers to these games, in illustration of Christian conflict, duty, and hope. He says he "runs not as uncertainly ;" he "fights, not as one that beateth the air ;" he has in view, "not a corruptible, but an incorruptible crown." He also "keeps his body under, and brings it into subjection"—referring to the severe course of physical regimen and exercise required of Grecian competitors, preparatory to their public appearance.

There were four public solemn games in Greece—the Olympic, Pythian, Nemean, and Isthmian. The *Isthmian* games were celebrated near the Isthmus of Corinth, whence they derived their name. They were observed every third, and afterwards, every fifth year, and held so sacred, that a public calamity could not prevent their celebration. The victors were crowned with a garland of *pine leaves*.

The *Nemean* games were celebrated in the town of Nemea, in Argolis, every third year. The victors were crowned with *parsley*.

The *Pythian* games were celebrated every fifth year, in the second year of every Olympiad, near Delphi. The victors were crowned with *laurels*.

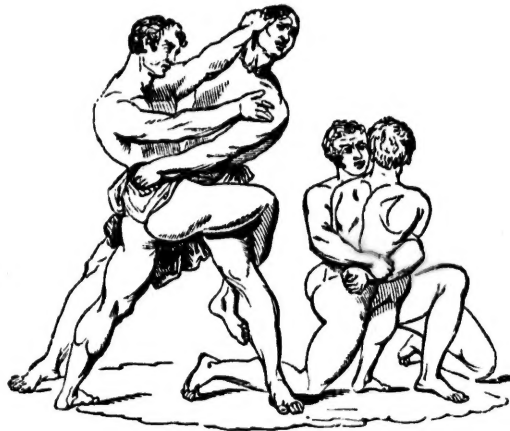
The *Olympic* games were celebrated the first month of every fifth year at Olympia, a town situated on the river Alpheus, in the territory of Elis, on the western coast of the Peloponnesus. These were the most famous games of the Greeks ; they lasted five days, and drew together an immense concourse from all parts of Greece, and even from foreign countries. No one was permitted to contend in them unless he had prepared himself, by continual exercises, for ten months in the public gymnasium at Elis. The competitors were obliged to take an oath that they would use no unlawful means to obtain the victory. The prize bestowed on the victor was a crown of *olive* ; yet this honor was considered equal to the *victory of a general* among the Greeks, and to a *triumph* among the Romans. THUCYDIDES informs us that during the celebration of these games, a sacred truce was observed between all the States of Greece; all hostile operations were suspended, and, for the time, they regarded each other as fellow-citizens and brethren.

The only authentic chronology of the Greeks, is connected with these games. The space (four years) that intervened between one of their celebrations and another, was called an *Olympiad*. The era of the first Olympiad is 776 years before the Christian era. The Olympiads may be reduced to the common era, by multiplying the Olympiad, immediately preceding the one in question, by 4, and adding the number of years to the given Olympiad, and, if B. C., subtracting the amount from 777 ; if A. D., subtract 776 from the amount.

The exercises practised at these games were, first, foot-races alone : but they afterwards consisted also of throwing the quoit, boxing, wrestling, horse, and chariot races. At that period, when gunpowder was unknown, and war had not become a science, and each battle was only a multitude of single combats, such exercises of bodily strength and activity were much cultivated by most ancient nations ; but the Greeks were the first to reduce them to a system, and invest them with the importance of a national institution.

These games were not wholly confined to gymnastic and athletic exercises ; contests were also, at later periods, admitted between poets, orators, musicians, historians, philosophers, and artists of different descriptions. It was there that portions of the history of **HERODOTUS** were first recited or read ; and it was by thus listening to the fascinating tales of the Father of profane history, that **THUCYDIDES** first caught the inspiration which prompted him to write a history as philosophical as it is brilliant, and as charming as it is profound. It was at these games also, that **LYSIAS** recited his harangue on the fall of the tyrant **DIONYSIUS**. Intellectual enjoyments thus became blended with social amusements and athletic contests ; and assemblages which first produced martial skill and prowess, were in after ages productive of social and intellectual refinement.

The following illustrations will give some idea of the principal athletic exercises which were practised at the Grecian games, and cannot fail to impress us with the much greater elevation of modern taste, and manners, and institutions, and especially of religion and morals, notwithstanding the boasted refinement and grandeur of Grecian taste and character.



WRESTLING.

In wrestling, the competitors were nearly or quite naked, and they seem to have displayed great skill and agility. Excited by the presence of a vast assembly, they put forth amazing efforts,

and though bruised and maimed in the struggle, they gave no evidence of suffering.



LEAPING.

Leaping was performed by springing over a bar. No one was permitted to enter into this sport, at the Olympic games, who had not practised ten months.



BOXING.

Boxing was a favourite sport, and appears to have been practised much as it is now in England. No unfair advantage was

allowed in this, or any other contest. The least trick was severely punished.



THE DISCUS.

Throwing the *discus* or *quoit*, a round piece of stone, iron or brass, called forth the energies of the most powerful men, and the feats performed, in hurling large weights, were astonishing.



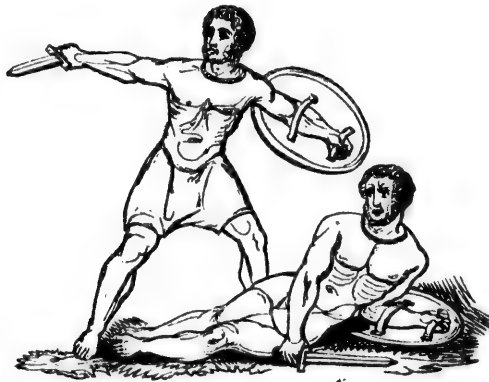
RUNNING.

Running was practised, and if we may believe the accounts which are given by Greek writers, the racers must have surpassed the fleetest of modern pedestrians.



CHARIOT RACING.

Horse racing and chariot racing were conspicuous among the sports. The latter was particularly imposing, and persons of the first rank engaged in it. Such was the applause bestowed, that it was fancied that Alexander, the son of Philip, and afterwards the celebrated conqueror, might desire to engage in the contest ; but when it was proposed, the haughty youth declined, unless kings could be his rivals.



GLADIATORS.

The Gladiators fought with swords, and were exhibited at funerals, and public festivals, for the amusement of the Roman people. They were at first taken from captives in war, or malefactors, afterwards from slaves trained to the profession.

The first poets and musicians were assembled from all quarters, and an immense crowd of rich and poor, high and low, gathered to witness these displays, which were not only interesting from the excitement they produced, but from the sanction that the popular religion bestowed upon the occasion. It would appear, that at the present day, there is no public festivity, in any country, which engages so deeply the passions of mankind as the games of ancient Greece and Rome.

II.

PHYSICAL TRAINING IN SCHOOLS.

In the official "*Report on a System of Public Elementary Instruction for Upper Canada*,"—by the Chief Superintendent of Schools, (Second edition, printed by order of the House of Assembly, pp. 58–60,) are the following remarks on *Physical Training* in our Schools:

On the development of the *physical* powers, I need say but a few words. A system of instruction making no provision for those exercises which contribute to health and vigor of body, and to agreeableness of manners, must necessarily be imperfect. The active pursuits of most of those pupils who attend the public Schools, require the exercise necessary to bodily health; but the gymnastics regularly taught as a recreation, and with a view to the future pursuits of the pupil, and to which so much importance is attached in the best British Schools and in the Schools of Germany and France, are advantageous in various respects,—promote not only physical health and vigour, but social cheerfulness, active, easy and

graceful movements. They strengthen and give the pupil a perfect command over all the members of his body. Like the art of writing, they proceed from the simplest movement, to the most complex and difficult exercises, imparting a bodily activity and skill scarcely credible to those who have not witnessed them.

To the culture and command of all the faculties of the mind, a corresponding exercise and control of all the members of the body is next in importance. It was young men thus trained that composed the vanguard of Blucher's army ; and much of the activity enthusiasm and energy which distinguished them, was attributed to their gymnastic training at school. A training which gives superiority in one department of active life, must be beneficial in another. It is well known, as has been observed by physiologists, that "the muscles of any part of the body when worked by exercise, draw additional nourishment from the blood, and are by the repetition of the stimulus or exercise, increased in size, strength and freedom of action. The regular action of the muscles promotes and preserves the uniform circulation of the blood, which is the prime condition of health. The strength of a body or of a limb depends upon the strength of the muscular system, or of the muscles of the limb ; and as the constitutional muscular endowment of most people is tolerably good, the diversities of muscular power observable amongst men is chiefly attributable to exercise." The Youth of Canada are designed for active, and most of them for laborious occupations ; exercises which strengthen not one class of muscles, or the muscles of certain members only, but which develop the whole physical system, cannot fail to be beneficial.

The application of these remarks to common day schools must be very limited. They are designed to apply chiefly to boarding and training, to Industrial and Grammar Schools,—to those schools to the masters of which the prolonged and thorough educational instruction of youth is entrusted.

To physical education great importance has been attached by the best educators in all ages and countries. Plato gave as many as a thousand precepts respecting it. It formed a prominent feature in the best parts of the education of the Greeks and Romans. It has been largely insisted upon by the most distinguished educational

writers in Europe, from Charon and Montaigne, down to numerous living authors in France and Germany, England and America. It occupies a conspicuous place in the codes of School Regulations in France and Switzerland, and in many places in Germany. The celebrated Pestalozzi and DeFallenberg incorporated it as an *essential* part of their systems of instruction, and even as necessary to their success ; and experienced American writers and physiologists attribute the want of physical development and strength, and even health, in a disproportionally large number of educated Americans, to the absence of proper provisions and encouragements in respect to appropriate physical exercises in the Schools, Academies and Colleges of the United States.

In "*The English Journal of Education*" for January, 1852, and the succeeding months, we find a large space occupied, and numerous wood cuts given, in illustration of this subject. From these cuts we have had wood engravings made for the pages of this *Journal*. We therefore lay them before our readers, with extracts from the preliminary and accompanying remarks of our English contemporary:—

"In Switzerland, almost all the Schools, both primary and secondary, are provided with a *manège*, or gymnasium, having all the machinery necessary to a complete course of gymnastic exercises—a ladder, climbing ropes and poles, a cross-pole, parallel bars, leaping poles, a vaulting horse, and a large balancing pole. The apparatus is sometimes erected in the open air, sometimes under a covered roof ; and many of the schools have both a covered and an uncovered gymnasium. The covered gymnasiums have no floors, but a ground of loose sand, which can be raked up to render it soft. The uncovered gymnasiums are always placed in a field or grass-plot for the same reason.

Such is the interest which the Swiss students take in gymnastics that they form themselves into *Turnvereins*, or Gymnastic Associations, and each Association sends about some of its members from school to school in its own district, to organize the gymnasiums and give the benefit of their instruction and example to the scholars. Each of these associations holds annually a *Turnfest*, or Gymnastic Festival, at which all the members attend ; and a great

number of exercises are gone through upon every part of the apparatus in the *manège*, which they held for the purpose. This, however, is only preparatory to a great triennial festival, which is held at the principal Swiss towns in succession, as the government used to be. At this festival all the associations meet, and the members compete with one another for wreaths, prizes, and other distinctions, just as in the old Grecian games before they had been perverted from their original purpose and degraded into mere exhibitions of particular feats. People assemble from all parts of the country to witness the performances; the fine national songs of Switzerland and Germany, sung in chorus by the friendly antagonists, excite and sustain the general enthusiasm: the standards of the associations and the gay clothes of the spectators give a radiant aspect to the scene: everything contributes to the joyousness and merriment of the occasion. At the close of the festival, which generally lasts three days, the wreaths are placed upon the brows of the victors in the presence of the assembled spectators, and the prizes distributed by the hands of fair ladies, who thus grace with their presence the ceremony of the award, and impart a higher value to the marks of distinction.

All this is very well, it will be said, and feasible enough, in a country where the education of every member of the community is carefully provided for at the public expense, and where, so far from being a national debt, the governments of the several Cantons have generally a considerable surplus revenue at their disposal for public works. But we reply, that the expense of fitting up even a complete gymnastic ground need not be anything very considerable, if once the site is obtained; and that the play-ground of an elementary school may be furnished with the common apparatus at a cost almost insignificant. The most expensive piece of apparatus, after all, is the circular swing, which has already been erected in the play-grounds of so many schools. It is certainly right to provide first for this most exhilarating of gymnastic exercises. If the school-master were competent to give a course of gymnastic exercises he would have no difficulty, we imagine, in inducing the managers to supply the necessary apparatus. Besides, if the expense be the chief obstacle, it would be advisable, to ascertain whether the Lords of the Committee of Coun-

cil on Education might not be moved to make grants for this purpose. We are of opinion that their Lordships would deem the object of sufficient importance to justify a considerable expenditure of the public money ; for the present Government have already evinced their sense of the importance of gymnastics to the people, by the erection of the public gymnasium at Primrose Hill.

But, as our readers are aware, there is a large class of gymnastic exercises which do not require any apparatus at all ; and these are, in fact, more essential than the others, to which they are preliminary and introductory. They are such, namely, as are designed to develop the activity of the limbs rather than to call forth the physical strength. These should not be neglected in any school for children. They are very carefully taught in many of our boarding schools ; and we cannot see that they are less useful to the children of the poor than to those of the middle classes. This is one of the few particulars in which the middle schools are not behind the best elementary schools, and it is owing to the fact, that the former are able to pay for the services of a drill-sergeant, and the latter are not. But there is no reason whatever why every schoolmaster should not be his own drill-sergeant : in fact, were it possible to procure the services of a drill-sergeant in an elementary school, it would still be preferable that the master should superintend this and every other part of the discipline himself ; for he should be all in all to his own school.

In order to enable schoolmasters to give their pupils a regular training in gymnastics, we intend to insert in the Journal, from month to month, a graduated course of gymnastic exercises. Our subscribers will be able to commence the course at once in their schools, as the preliminary exercises do not require any apparatus ; and we trust, that, as the course progresses, managers may be induced to provide the requisite apparatus where this has not already been done.

It is hardly necessary to remind our readers of the more common and obvious advantages which result from gymnastic exercises.

The principal, of course, is the beneficial influence which they exert upon the health. This is a sufficient reason to induce every body to attach great importance to them ; but it is a consideration

which derives still greater weight in relation to the school and schoolmaster. The regular practice of these exercises will do much towards enabling both to discharge their duties with success ; and, in those schools where any thing like high pressure is put on, will act as a most useful safety valve. Besides, light hearts are the natural concomitants of good health, and certainly nowhere are they more desirable than in an elementary school, where there are already annoyances enough, in all likelihood, without those which result from the jarring of bad tempera. How much more pleasantly, both to teacher and taught, does the work of the school proceed where these are absent, and a cheerful tone prevails.

We would beg leave, however, in a special manner, to call attention to one advantage which is not so generally understood. It is thus referred to by M. de Fallenberg :—

“The *gymnastic exercises*, in all their forms, are a powerful aid to the practice of design, in cultivating the taste for the beauty of *form or motion*. Their effect in this respect is very obvious ; and the occasional festivals which are accompanied by gymnastic games, present examples of a high degree of cultivation in this respect. It is a spectacle which charms the eye, and exhibits the intimate connection of easy and graceful motion with the improvement of physical force, and the capacity to escape from danger or surmount obstacles.”

It has accordingly been remarked, that one reason for the pre-eminence of the ancients in sculpture, was the patronage bestowed upon the public gymnasiums, in which the artist could form his models from every variety of development of which the human form is susceptible. However this may be, there can be no doubt whatever that gymnastics do contribute materially to the *æsthetic* training of the mind.



III.

ILLUSTRATIONS OF GYMNASTICS.

The first *position*, in which the body must be placed, is the following :—

Heels close : toes turned outwards nearly at right angles : body upright : shoulders thrown back : stomach kept in : head easy : arms hanging straight by the sides : hands closed with the thumbs inside.

The habit of readily realizing this position having been gained, the first gymnastic action is to be attempted.

Action 1. Bring the arms quickly up in front, as high as the shoulders, (nails turned upwards) (*a* fig. 1), then swing them forcibly backwards, at the same time turning the nails backwards (*b* fig. 1), keeping the body perfectly upright. This action being mastered, and having been practised for five minutes, the next action is to be attempted.



(a) Fig. 1. (b) attempted.

Action 2. Stand erect as in the *position* first described. Put the hands on the hips, the thumbs placed behind, the fingers in front, and the feet close, and then rise as high as possible on the toes. Fig. 3 will illustrate this action to a certain extent. This action should be practised five minutes.



The third action may now be attempted.

Action 3. The elbows are to be drawn back, so that the fists may be close to the sides (*a* fig. 2) : then throw the arms straightforward (*b*) and then back as before.—The gymnast must become perfect in this before proceeding any further : a perfection in this action being intimately connected with, indeed an essential to, the satisfactory performance of many other actions.



(a) Fig. 2. (b)

Action 4. The feet are to be brought close, the hands on the hips, then rise on the toes, and jump on the toes with the knees kept perfectly straight (fig. 3).—This action is to be performed for five minutes : and the 12 first actions may be performed during one hour before breakfast, five minutes to each.



Fig. 3.

In the next action the arms are again brought into activity.



Fig. 4.

Action 5. The fists are to be brought up to the shoulders : the elbows being close to the sides. The arms are then to be thrown upwards, and then brought back again to the previous position.



Fig. 5.

Action 6. The hands are to be fixed on the hips, the feet close, and then throw the legs in front alternately : the knees being kept straight, the gymnast not moving from his first place, and keeping the body upright (fig. 5).

Action 7. The fists are to be brought up to the shoulders as in action 5, but to be turned a little inwards : the elbows close to the sides, as in action 5 ; and then throw the arms downward, and bring them back as before.



Fig. 6.

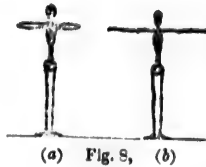
Action 8. The feet are to be brought close : the hands fixed on the hips : then throw the legs sideways (alternately), the toes being kept in front (fig 6.)

Action 9. This may be regarded as the actions 5 and 7 combined. The fists are to be brought to the shoulders, the elbows close to the sides ; then throw the arms upwards, then backwards, next downwards, and finally return. This combination of action requires much muscular power, and calls numerous muscles into activity, and cannot be well performed until the muscles of the leg have been strengthened by the previous exercises. For, though it seems difficult, to those unacquainted with the muscular system, to conceive the connection between these motions of the arms, and the power of the muscles of the legs, the anatomist will be aware, that, without considerable power in the muscles of the legs, these motions of the arms and the position of the body to be preserved, could not be realized.



Fig. 7.

Action 10. This again brings the gymnast to his legs. He puts his hands on the hips, keeps his feet close, and then, standing on his toes, kicks the thighs alternately with his heels (fig. 7).



Action 11. In this action the arms and the muscles of the back are called into action. Raise the elbows to the height of the shoulders (*a* fig. 8), with the fists on the front of the shoulders, the nails turned inwards, and then throw the arms forcibly back (*b*), the body being kept upright.

Action 12. This action is connected with the preceding. Raise the elbows as high as the shoulders: fists on shoulders, nails being downwards: then throw the arms forcibly back, keeping them level with the shoulders.



Fig. 9.

Action 13. This action exercises the lower extremities and the muscles of the back. The hands are to be put on the hips: the feet are placed close: then rise on the toes, and kick the thighs with both the heels at once (*fig. 9.*)



Fig. 10.

Action 14. In this the arms are to be turned round front to back: body quite upright. This action has been deemed likely to be injurious, and it would be, if attempted previously to the exercises already detailed; but from what has been stated regarding the articulating surface of the head of the arm bone with the cavity of the shoulder blade, it will be apparent that such action is perfectly scientific (*fig. 10.*)



Fig. 11.

Action 15. The feet are to be brought close: the hand fixed on the hips. Then touch the breast alternately with the knees, the toes pointing to the ground, taking care to keep the body perfectly upright. This exercise will be at first difficult, but it is astonishing the effect that it has in influencing the circulation, and thereby promoting health.

Action 16. This is similar to action 14, except that the arms are to be turned from back to front, instead of from front to back.



Fig. 12.

Action 17. This is looked upon by many as almost insurmountable, and much jocularly is produced by the failures in the first few attempts. The hands are to be fixed on the hips, the feet being close. Then rise on the toes, bend the knees, and lower the body gradually till the thighs touch the heels: the knees being kept close and the body upright, rise very gradually.



Fig. 13.

Action 18. This next action has a most powerful effect in giving full activity to the muscles of the chest. Bring the right fist to the left shoulder; extend the left arm in a line with the shoulder; throw the right arm towards the right side, nails towards the ground; then bring the left fist to the right shoulder, thus altering several times.

Action 19. The feet are to be brought close, the hands on hips, then raise the left leg behind, stand on the right toe, and kick the right thigh with the right heel.



Fig. 14.

Action 20. Open the hands; then raise the arms sideways, and touch the back of the hands over the head (fig. 14.)

Action 21. The hands are to be placed on the hips; the feet close; then raise the right leg behind, stand on the left toe, and kick the left thigh with the left heel.

Action 22. Open the hands, bring them in front (the palms touching), and swing the arms backward the height of shoulders, till the backs of the hands meet behind.



Fig. 15.

Action 23. The feet are to be placed close, the hands on the hips. Raise the right leg in front, and hold the right toe with the right hand for some time; then do the same with the left (fig. 15). The knees are to be kept straight.

Action 24. Open the hands, extend them in front, the backs touching, swing them in a line with the shoulders till the palms touch behind. See action 21.



Fig. 16.

Action 25. The feet being placed close, the hands fixed on the hips, rise on the toes, then bend the knees, and lower the body gradually till the thighs touch the heels (see action 17): extend the arms in front, and fall forwards, so that the body forms a straight line from the head to the heels, and rests on the hands and the toes.



Fig. 17.

Action 26. The feet being placed close, the hands open, the arms straight upward, the palms in front, bend the body forward, and touch the ground with the points of the fingers. The knees are to be kept straight (fig. 17).

Action 27. This is the same as action 25, only springing up and clapping the hands.

Action 28. This action is performed by two, standing opposite to or facing each other. The left hand on hip, the right foot forward, the right arm in front; then grasp each other's hands, and try to bring the arm down to the right or left.



Fig. 18.

Action 29. The feet close, the hands on the hips: cross the legs, bend the knees gradually, sit down, and rise again (fig. 18).

Action 30. The reverse of action 28, viz., with the left arm, &c.



Fig. 19.

Action 31. The feet close, the arms extended in front, raise the left leg in front, bend the right knee gradually, and sit down on the ground, then get up again in the same position.



Fig. 20.

Action 32. This is performed by two persons facing each other. The left hand on the hip, the right foot in front, lock the middle finger on each other's right hand, and pull back (fig. 20).

Action 33. As action 31, performed with left leg.

Action 34. As action 32, with left hand.



Fig. 21.

Action 35. The feet close, the hands on the hips, jump up, at the same time spreading out the legs (fig. 21).



Fig. 22.

Action 36. Let the palms of the hands touch behind, fingers pointing downwards, turn the fingers inward, and bring the hands as high as possible up the back, taking care to keep the palms of the hands close together (fig. 22).



Fig. 23.

Action 37. The feet close, the hands on hips, jump up and spread out the legs, and cross them alternately (fig. 23).



Fig. 24.

Action 38. This is performed by two sitting on the ground, who face each other, the soles of the feet touching, then grasping a stick, and pulling against each other, first, with knees straight; secondly, bent; and third, with legs open.



Fig. 25.

Action 39. The hands on hips, the right foot in front, the toe pointing downwards, spring or jump twice on the right toe, and twice on the left, alternately, the knees being kept straight.



Fig. 26.

Action 40. Hook each other's hands, the toes opposite; then lean back, and go round quickly (fig. 26).

Action 41. As action 39, left foot in front.

Action 42. The feet close, the hands on the hips, rise on the toes, and jump forward with straight knees.



Fig. 27.

Action 43. Grasp the left hand with the right, bring the arms behind the head, and move them from one side to the other (fig. 27).

Action 44. Action 42 backwards.

Action 45. Bring the right arm round the neck and chin, and try to catch the right ear with the right hand.

Action 46. The feet close, the hands on the hips, run forward and kick the thighs alternately.

Action 47. Action 45 with the left arm.

Action 48. The feet close, the hands on the hips, jump forward and kick both thighs with both heels at once.



Fig. 28.

Action 49. See action 17, fig. 12: then extend the arms in front, and fall down on the hands, the arms being straight, the body being brought so as to form a straight line from head to heel, as in action 25. Remain in this position a short time; then bring the feet, by a jump, between the hands, and rise (fig. 28).



Fig. 29.

Action 50. The hands on the hips, the left leg in front, toe towards the ground; then jump forward on the right toe, both legs quite straight (fig. 29).

Action 51. See action 49, then spring up from the ground and clap the hands; rise as in action 50.

Action 52. The same as action 50, only with the left toe.



Fig. 30.

Action 53. The feet close, the hands on the hips, then spread the legs gradually as far as you can, and then try to put the palms of the hands on the ground, the middle between the legs (with great care), (fig. 30). This action cannot well be performed until the others, previously described, have been performed with diligence, so as to be performed with ease. Then this action can be performed, and that without much difficulty.

Action 54. The hands on the hips; then run forward on the toes, the knees being kept straight.



Fig. 31.

Action 55. Fold the hands behind, put the right foot to the right side forward as far as you can, then bend the right knee, and try to touch the ground with the forehead (fig. 31).



Fig. 32.

Action 56. The feet close, the hands on the hips, then rise on the toes, and jump to the right or left side quite round (fig 32).

Action 57. The same as action 55, only with the left leg.



Fig. 33.

Action 58. Lift the left foot behind, bend the right knee, lower the body gradually, touch the ground with the left knee, and rise again (fig. 33).



Fig. 34.

Action 59. This action is performed by two facing each other; each party is to fold the arms, the elbows being kept close to the body, raise the left leg behind, hop on the right leg against one another, and try to bring the other out of his position by a blow with the shoulder, against his shoulder (fig. 34).

Action 60. This is the same as action 51, on the left foot.

Action 61. This is the same as action 59, only that the left foot is used to hop upon; the blow is given with the left shoulder.

Having thus noticed the actions to be performed by the individual, unaided by any machine, the next branch of gymnastic exercises will introduce the reader into exercises in which the gymnast performs certain evolutions by means of a *POLE*, placed in a *horizontal position*.

In the first exercises the thumbs are to be on the same side of the pole as the fingers, that is, not grasping the pole as one would a roll of paper; arms straight in a line with the body, so that the power may be more effectually applied to move its weight; the knees are to be kept straight and stiff, unless otherwise expressed.

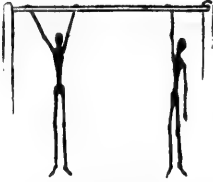
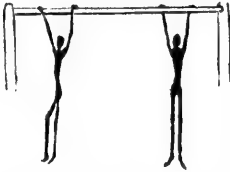


Fig. 35.

Action 62. The gymnast is to hang from the pole by one hand ; first, by the right, then by the left, six times alternately (fig. 35).

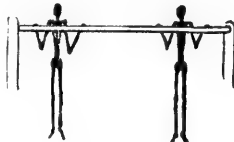


No. 2. Fig. 36. No. 1.

Action 63. In this action the gymnast walks on the hands along the pole ; the hands being placed over the pole on the same side with the body (fig. 36. No. 1).

Action 64. This action is the same as the preceding ; only that the hands are under, or grasping the pole on the opposite side of the body.

Action 65. In this the gymnast walks from one end of the pole to the other ; the hands being placed over the pole on each side, face opposite the upright post : first forwards to one end, then backwards to the other (Fig. 36, No. 2).



No. 2. Fig. 37. No. 1.

Action 66. This action consists in rising up and looking over the pole, hands over, three times (fig. 37, No. 1).

Action 67. The same as the preceding, only with the hands under (fig. 37, No. 2).

Action 68. The hands are to be placed on each side of the pole, and then the shoulders are to be brought alternately up to the pole ; each shoulder three times.

Action 69. This consists in jumping along the pole, the hands over on one side.

Action 70. The same as the preceding, only hands under.

Action 71. Hands on each side jumping along the pole. In these last three actions it is advisable to draw up the body a little before making the spring or jump forward.

Action 72. In this the person forms the letter L, by hanging by both hands on the pole, and then endeavouring to bring the legs into a horizontal position.



Fig. 38.

Action 73. In this action bring the instep up so as to touch the pole (fig. 38).

Action 74. The hands are fixed on each side of the pole, and the gymnast then throws each leg over alternately.



Fig. 39.

Action 75. At first the same as action 73; then keep the instep firm against the pole, and bring the body between the arms as in the illustration (fig. 39).



Fig. 40.

Action 76. The hands are fixed on *each* side of the pole, and the legs are to be brought up on the outside of each arm (fig. 40).



Fig. 41.

Action 77. In this action both hands being fixed on *one* side, the legs are brought between the arms (fig. 41).



Figs. 42 and 43.

Action 78. In this the gymnast swings, and jumps up as he swings back, and comes down on the pole again (figs. 42 and 43).



Fig. 44.

Action 79. This action consists in getting *up* on the pole. First throw the right leg over the pole, then, with a spring bring up the right elbow; lastly, by another spring, bring up both arms straight, so as to sit across the pole (fig. 44).



Fig. 45.

Action 80. Draw up the body as high as possible, and with a spring, elevate both elbows, at once if possible, or one at a time; then rise gradually; the whole of the body being on one side of the pole; change the position of the hands, and come gradually over the pole till the feet touch the ground (fig. 45).



Fig. 46.

Action 81. In this action the hands are fixed one on each side; then jump and change hands; first, with knees bent; second, with the knees straight.



Fig. 47.

Action 82. Rise up as high as possible, and throw the arms over the pole, holding firmly by them (fig. 46).

Action 83. Rise up as before, and try to keep up the body by the right arm only: and then with the left arm (fig. 47).



Fig. 48.

Action 84. In this action the hands being either over or under the pole, raise the legs up in front, and go quite over the pole (fig. 48).



Fig. 49.

Action 85. In this action one leg is to be fixed over the pole, the knee being bent ; and then swing completely round (fig. 49).



Fig. 50.

Action 86. Sit across the pole, and swing round, holding tight, the hands being fixed on each side of the pole (fig. 50).

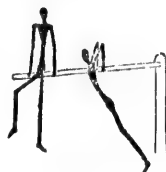


Fig. 51.

Action 87. Get upon the pole as in a previous action, then bring both legs over the pole, so as to sit thereon : then gradually lower the body so as to swing with arms behind (fig. 51).



Fig. 52.

Action 88. Get up and over, as in the last action ; then catch the pole with bent arms separately ; then catch hold of the trousers, and swing backward completely round (fig. 52).

Action 89. Hold the pole by the right arm, then grasp the wrist with the left hand, and try to draw yourself up ; then perform the same action with the left arm.



Fig. 53.

Action 90. In this action the letter L is formed by hanging by one arm, see action 72 (fig. 53).



Fig. 54.

Action 91. Kneel upon the pole, hands on each side, and swing off the pole (fig. 54).

Action 92. Hanging by both hands on the same side at one end of the pole, and turning from one side of the pole to the other, till you have reached the other end.



Fig. 53.

Action 93. In this action the gymnast commences as in action 77, then passes the legs completely through, and hangs them down; he then draws them gradually back between the arms (fig. 55). This action can only be performed by the experienced gymnast without danger: with him there is none.



Fig. 56.

Action 94. Hang on the end of the pole, hands on each side, face towards the post, swing backwards, and catch the pole with the toes, and hang down, as in the annexed figure (fig. 56).



Fig. 57.

Action 95. First throw the right leg over the pole, then with a spring bring up the right elbow in this position; throw the left arm over the pole, and hang in that position (fig. 57).



Fig. 58.

Action 96. Get up on the pole as in action 80, the arms being straight; then gradually sink down and kiss the pole, and then rise gradually to the first position (fig. 58).



Fig. 59.

Action 97. Sit across the pole, and, with a firm grasp, endeavour to raise the body off the pole till the back is horizontal.



Fig. 60.

Action 98. Throw the left leg over the pole, then at the same time throw both arms over the pole, holding by the arm only (fig. 60).



Fig. 61.

Action 99. Throw the right leg over the pole, the left arm being underneath, and the right arm hanging down (fig. 61).



Fig. 62.

Action 100. Hang on the pole, the hands on each side, and then raise the legs on each side of the pole, as high as possible (fig. 62).



Fig. 63.

Action 101. Hang on the pole, the hands on one side; then spring at once on to the pole, and balance the body on the arms (fig. 63).



Fig. 64.

Action 102. Sit on the pole; suddenly drop backward, and clasp the pole with the hams, hanging down (fig. 64).

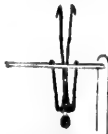


Fig. 65.

Action 103. Hang on the pole, the hands on one side; and gradually bring up the legs till they are perpendicular, the arms being straight (fig. 65).



Fig. 66.

Action 104. Hang on the pole, the hands on both sides, throw both legs at once over one side of the pole, then over the other; do this several times (fig. 66).

These HORSE exercises must not be attempted until the preceding exercises have been performed, so as to realise perfect capability in their performance. The gymnast should perform only one of these actions at a time, gaining perfect capability in each before proceeding to the next.

In performing the following exercises, the body and head are to be kept upright, and the knees and ankles straight, unless otherwise expressed, or where a change is absolutely necessary.



Fig. 67.

Action 105. Place the hands on the middle of the pommels, thumbs inside, and spring up so as to bring the arms quite straight. Do this several times without resting, at first slowly, afterwards more quickly (fig. 67).



Fig. 68.

Action 106. Hands on pommels as before, spring up and touch the saddle with the toes (fig. 68).



Fig. 69.

Action 107. As action 105 ; at the same time spread the legs so as to touch the sides of the horse with the toes (fig. 69.)



Fig. 70.

Action 108. Spring up, and throw up the right leg, keeping the other straight ; do this several times (fig. 70).

Action 109. As action 108 with the left leg.



Fig. 71.

Action 110. As action 106, and cross the legs on coming down (fig. 71).

Action 111. Jump up, and rest with the hands on the pommels, arms straight, thighs against side of horse, spring away from the horse and come back again several times, without coming to the ground (fig. 72).

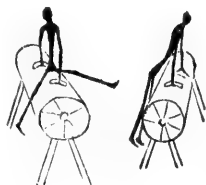


Fig. 73.

Action 112. To mount the horse : place the hands on the pommels, thumbs inside, spring up, rest for a moment with thighs against sides of horse, then throw the right leg over the back pommel, and sit perfectly upright in the saddle.—To dismount: place the left hand on the front pommel, thumb inside, and the right hand on the saddle in front of the body, and spring off (fig. 73).



Fig. 74.

Action 113. Mount as directed in action 112: place both hands close together on front pommel, thumbs in front, fingers behind, arms straight, then raise the body as high as possible several times (fig. 74).

Action 114. As action 113, and swing the body backwards and forwards, knees straight.



Fig. 75.

Action 115. As action 114, and bring the feet on the saddle, behind the hands (fig. 75).

Action 116. Jump on end of horse, and walk on the hands along the back of horse, with the body a little raised, as in action 113.

Note.—In springing up, jump from the toes. In sitting on the horse the thighs should press the sides of it, so as to leave a space between the body and the saddle, just sufficient for the open hand between them.



Fig. 76.

Action 117. Hands on the pommels, spring up, rest a moment, then throw the right leg over the horse, lifting the right hand to let the leg pass over the back pommel into the saddle, bringing down the hand quickly on the pommel. Throw the leg back again, observing the same precautions: do this several times without coming to the ground.

Action 118. As action 117, with the left leg on the other side.



Fig. 77.

Action 119. Hands on the pommels, spring up, at the same time turn the body a little on one side, and throw the right leg over the front pommel, lifting up the left hand to let the right leg pass (fig. 77).

Action 120. As action 119 on the other side, with left leg.



Fig. 78.

Action 121. Hands on the pommels, spring up, and instead of one leg, as in action 119, throw both legs over in front, so as to come down to the ground on the feet, with face towards the head of horse. (fig. 78).

Action 122. As action 121, on the other side.

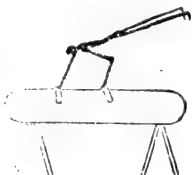


Fig. 79.

Action 123. As action 110, but instead of coming against the side of the horse, throw both legs over the back of the horse, and come down on the toes on the other side, with face towards the saddle (fig. 79).



Fig. 80.

the right side, and when in crossing the left leg goes over the right, turn the body to the left side.



Fig. 81.

back pommel, and swing round on back of horse ; do this alternately several times (fig. 81).



Fig. 82.

Action 126. As action 111, draw up the knees close to the chest, and throw them between the arms over the saddle, remaining on your hands, and the back of the thighs leaning against the opposite side of the horse, but without the feet touching the ground ; then draw up your legs again, and bring them back to the first position (fig. 82).



Fig. 83.

Action 127. Spring up, resting on the pommels with arms straight, throw the right leg between them over the saddle ; bring it back again, and at the same instant pass the left leg over, resting all the while on the hands ; do this several times (fig. 83).



Fig. 84.

Action 128. Spring up, resting on the pommels with arms straight, throw the body over the horse with legs spread, first standing, secondly with a run.

Action 129. Hands on the pommels, &c., as in action 127, but throw both legs through, and keep them straight out in form of letter L, without touching the saddle (fig. 84).



Fig. 85.

Action 130. Run and jump cleverly over the saddle.



Fig. 86.

Action 131. Mount, then action 113, and bring the feet before the front pommel, outside of the arms, then behind, alternately (fig. 86).



Fig. 87.

Action 132. Run, and placing the hands on the pommels, throw the body completely over in front (fig. 87).



Fig. 88.

Action 133. Run, and placing the hands on the pommels, take a somerset over the saddle (fig. 88).



Fig. 89.

Action 134. Hands on the pommels, spring up and throw the legs on each side of the arms outside, and raise them up so as to be clear of the horse (fig. 89).

Action 135. Hands on the pommels, spring up and kneel on the saddle, bring the knees forward so that the instep touches the saddle, then give a spring and jump off, coming down on the other side on the toes.



Fig. 90.

Action 136. Jump on the back of the horse, place the hands on the back pommel, as directed in action 114, and swing off backward (fig. 90).

Action 137. Run, and jump into the saddle from behind, and swing the body off from the front pommel, as in action 136.

Action 138. Run, and placing the right hand on the back of the horse, spring up, and throw both legs over, as directed in action 121 (fig. 91).



Fig. 91.

Action 139. Run from behind, and throw the right leg over the back of the horse, behind the saddle, as in action 119, first on one side, then on the other with the left, afterwards throw both legs over.

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